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# Public Service Commission

March 4, 2008

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RECEIVED-FPSC

Mr. Scott Boyd, Executive Director  
Joint Administrative Procedures Committee  
Room 120 Holland Building  
Tallahassee, FL 32399-1300

RE: Docket No. 070674-EI – Proposed amendment of Rule No. 25-6.065, F.A.C.,  
Interconnection and Net Metering of Customer-Owned Renewable Generation

Dear Mr. Boyd:

The Commission has approved the adoption of Rule 25-6.065 without changes.

We plan to file the rule for adoption on March 12, 2008.

Sincerely,

A handwritten signature in black ink, appearing to read "Rosanne Gervasi".

Rosanne Gervasi  
Associate General Counsel

Enclosure

c: Office of Commission Clerk

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FPSC-COMMISSION CLERK

1 25-6.065 Interconnection and Net Metering of Customer-Owned Renewable Generation

2 (1) Application and Scope. The purpose of this rule is to promote the development of  
3 small customer-owned renewable generation, particularly solar and wind energy systems;  
4 diversify the types of fuel used to generate electricity in Florida; lessen Florida's dependence  
5 on fossil fuels for the production of electricity; minimize the volatility of fuel costs; encourage  
6 investment in the state; improve environmental conditions; and, at the same time, minimize  
7 costs of power supply to investor-owned utilities and their customers. This rule applies to all  
8 investor-owned utilities, except as otherwise stated in subsection (10).

9 (2) Definitions. As used in this rule, the term

10 (a) "Customer-owned renewable generation" means an electric generating system  
11 located on a customer's premises that is primarily intended to offset part or all of the  
12 customer's electricity requirements with renewable energy. The term "customer-owned  
13 renewable generation" does not preclude the customer of record from contracting for the  
14 purchase, lease, operation, or maintenance of an on-site renewable generation system with a  
15 third-party under terms and conditions that do not include the retail purchase of electricity  
16 from the third party.

17 (b) "Gross power rating" means the total manufacturer's AC nameplate generating  
18 capacity of an on-site customer-owned renewable generation system that will be  
19 interconnected to and operate in parallel with the investor-owned utility's distribution  
20 facilities. For inverter-based systems, the AC nameplate generating capacity shall be  
21 calculated by multiplying the total installed DC nameplate generating capacity by .85 in order  
22 to account for losses during the conversion from DC to AC.

23 (c) "Net metering" means a metering and billing methodology whereby customer-  
24 owned renewable generation is allowed to offset the customer's electricity consumption on-  
25 site.

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1           (d) “Renewable energy,” as defined in Section 377.803, Florida Statutes, means  
2 electrical, mechanical, or thermal energy produced from a method that uses one of more of the  
3 following fuels or energy sources: hydrogen, biomass, solar energy, geothermal energy, wind  
4 energy, ocean energy, waste heat, or hydroelectric power.

5           (3) Standard Interconnection Agreements. Each investor-owned utility shall, within  
6 30 days of the effective date of this rule, file for Commission approval a Standard  
7 Interconnection Agreement for expedited interconnection of customer-owned renewable  
8 generation, up to 2 MW, that complies with the following standards:

9           (a) IEEE 1547 (2003) Standard for Interconnecting Distributed Resources with  
10 Electric Power Systems;

11           (b) IEEE 1547.1 (2005) Standard Conformance Test Procedures for Equipment  
12 Interconnecting Distributed Resources with Electric Power Systems; and

13           (c) UL 1741 (2005) Inverters, Converters, Controllers and Interconnection System  
14 Equipment for Use With Distributed Energy Resources.

15           (d) A copy of IEEE 1547 (2003), ISBN number 0-7381-3720-0, and IEEE 1547.1  
16 (2005), ISBN number 0-7381-4737-0, may be obtained from the Institute of Electric and  
17 Electronic Engineers, Inc. (IEEE), 3 Park Avenue, New York, NY, 10016-5997. A copy of  
18 UL 1741 (2005) may be obtained from COMM 2000, 1414 Brook Drive, Downers Grove, IL  
19 60515.

20           (4) Customer Qualifications and Fees.

21           (a) To qualify for expedited interconnection under this rule, customer-owned  
22 renewable generation must have a gross power rating that:

23           1. does not exceed 90% of the customer’s utility distribution service rating; and

24           2. falls within one of the following ranges:

25           Tier 1 - 10 kW or less;

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1 Tier 2 – greater than 10 kW and less than or equal to 100 kW; or

2 Tier 3 – greater than 100 kW and less than or equal to 2 MW.

3 (b) Customer-owned renewable generation shall be considered certified for  
4 interconnected operation if it has been submitted by a manufacturer to a nationally recognized  
5 testing and certification laboratory, and has been tested and listed by the laboratory for  
6 continuous interactive operation with an electric distribution system in compliance with the  
7 applicable codes and standards listed in subsection (3).

8 (c) Customer-owned renewable generation shall include a utility-interactive inverter,  
9 or other device certified pursuant to subsection (4)(b) that performs the function of  
10 automatically isolating the customer-owned generation equipment from the electric grid in the  
11 event the electric grid loses power.

12 (d) For Tiers 1 and 2, provided the customer-owned renewable generation equipment  
13 complies with subsections (4)(a) and (b), the investor-owned utility shall not require further  
14 design review, testing, or additional equipment other than that provided for in subsection (6).  
15 For Tier 3, if an interconnection study is necessary, further design review, testing and  
16 additional equipment as identified in the study may be required.

17 (e) Tier 1 customers who request interconnection of customer-owned renewable  
18 generation shall not be charged fees in addition to those charged to other retail customers  
19 without self-generation, including application fees.

20 (f) Along with the Standard Interconnection Agreement filed pursuant to subsection  
21 (3), each investor-owned utility may propose for Commission approval a standard application  
22 fee for Tiers 2 and 3, including itemized cost support for each cost contained within the fee.

23 (g) Each investor-owned utility may also propose for Commission approval an  
24 Interconnection Study Charge for Tier 3.

25 (h) Each investor-owned utility shall show that their fees and charges are cost-based

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1 and reasonable. No fees or charges shall be assessed for interconnecting customer-owned  
2 renewable generation without prior Commission approval.

3 (5) Contents of Standard Interconnection Agreement. Each investor-owned utility's  
4 customer-owned renewable generation Standard Interconnection Agreement shall, at a  
5 minimum, contain the following:

6 (a) A requirement that customer-owned renewable generation must be inspected and  
7 approved by local code officials prior to its operation in parallel with the investor-owned  
8 utility to ensure compliance with applicable local codes.

9 (b) Provisions that permit the investor-owned utility to inspect customer-owned  
10 renewable generation and its component equipment, and the documents necessary to ensure  
11 compliance with subsections (2) through (4). The customer shall notify the investor-owned  
12 utility at least 10 days prior to initially placing customer equipment and protective apparatus  
13 in service, and the investor-owned utility shall have the right to have personnel present on the  
14 in-service date. If the customer-owned renewable generation system is subsequently modified  
15 in order to increase its gross power rating, the customer must notify the investor-owned utility  
16 by submitting a new application specifying the modifications at least 30 days prior to making  
17 the modifications.

18 (c) A provision that the customer is responsible for protecting the renewable  
19 generating equipment, inverters, protective devices, and other system components from  
20 damage from the normal and abnormal conditions and operations that occur on the investor-  
21 owned utility system in delivering and restoring power; and is responsible for ensuring that  
22 customer-owned renewable generation equipment is inspected, maintained, and tested in  
23 accordance with the manufacturer's instructions to ensure that it is operating correctly and  
24 safely.

25 (d) A provision that the customer shall hold harmless and indemnify the investor-

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1 owned utility for all loss to third parties resulting from the operation of the customer-owned  
2 renewable generation, except when the loss occurs due to the negligent actions of the investor-  
3 owned utility. A provision that the investor-owned utility shall hold harmless and indemnify  
4 the customer for all loss to third parties resulting from the operation of the investor-owned  
5 utility's system, except when the loss occurs due to the negligent actions of the customer.

6 (e) A requirement for general liability insurance for personal and property damage, or  
7 sufficient guarantee and proof of self-insurance, in the amount of no more than \$1 million for  
8 Tier 2, and no more than \$2 million for Tier 3. The investor-owned utility shall not require  
9 liability insurance for Tier 1. The investor-owned utility may include in the Interconnection  
10 Agreement a recommendation that Tier 1 customers carry an appropriate level of liability  
11 insurance.

12 (f) Identification of any fees or charges approved pursuant to subsection (4).

13 (6) Manual Disconnect Switch

14 (a) Each investor-owned utility's customer-owned renewable generation Standard  
15 Interconnection Agreement may require customers to install, at the customer's expense, a  
16 manual disconnect switch of the visible load break type to provide a separation point between  
17 the AC power output of the customer-owned renewable generation and any customer wiring  
18 connected to the investor-owned utility's system. Inverter-based Tier 1 customer-owned  
19 renewable generation systems shall be exempt from this requirement, unless the manual  
20 disconnect switch is installed at the investor-owned utility's expense. The manual disconnect  
21 switch shall be mounted separate from, but adjacent to, the meter socket and shall be readily  
22 accessible to the investor-owned utility and capable of being locked in the open position with  
23 a single investor-owned utility padlock.

24 (b) The investor-owned utility may open the switch pursuant to the conditions set  
25 forth in subsection (6)(c), isolating the customer-owned renewable generation, without prior

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1 notice to the customer. To the extent practicable, however, prior notice shall be given. If  
2 prior notice is not given, the utility shall at the time of disconnection leave a door hanger  
3 notifying the customer that their customer-owned renewable generation has been  
4 disconnected, including an explanation of the condition necessitating such action. The  
5 investor-owned utility shall reconnect the customer-owned renewable generation as soon as  
6 the condition necessitating disconnection is remedied.

7 (c) Any of the following conditions shall be cause for the investor-owned utility to  
8 disconnect customer-owned renewable generation from its system:

9 1. Emergencies or maintenance requirements on the investor-owned utility's electric  
10 system;

11 2. Hazardous conditions existing on the investor-owned utility system due to the  
12 operation of the customer's generating or protective equipment as determined by the investor-  
13 owned utility;

14 3. Adverse electrical effects, such as power quality problems, on the electrical  
15 equipment of the investor-owned utility's other electric consumers caused by the customer-  
16 owned renewable generation as determined by the investor-owned utility;

17 4. Failure of the customer to maintain the required insurance coverage.

18 (7) Administrative Requirements.

19 (a) Each investor-owned utility shall maintain on its website a downloadable  
20 application for interconnection of customer-owned renewable generation, detailing the  
21 information necessary to execute the Standard Interconnection Agreement. Upon request the  
22 investor-owned utility shall provide a hard copy of the application within 5 business days.

23 (b) Within 10 business days of receipt of the customer's application, the investor-  
24 owned utility shall provide written notice that it has received all documents required by the  
25 Standard Interconnection Agreement or indicate how the application is deficient. Within 10

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1 business days of receipt of a completed application, the utility shall provide written notice  
2 verifying receipt of the completed application. The written notice shall also include dates for  
3 any physical inspection of the customer-owned renewable generation necessary for the  
4 investor-owned utility to confirm compliance with subsections (2) through (6), and  
5 confirmation of whether a Tier 3 interconnection study will be necessary.

6 (c) The Standard Interconnection Agreement shall be executed by the investor-owned  
7 utility within 30 calendar days of receipt of a completed application. If the investor-owned  
8 utility determines that an interconnection study is necessary for a Tier 3 customer, the  
9 investor-owned utility shall execute the Standard Interconnection Agreement within 90 days  
10 of a completed application.

11 (d) The customer must execute the Standard Interconnection Agreement and return it  
12 to the investor-owned utility at least 30 calendar days prior to beginning parallel operations  
13 and within one year after the utility executes the Agreement. All physical inspections must be  
14 completed by the utility within 30 calendar days of receipt of the customer's executed  
15 Standard Interconnection Agreement. If the inspection is delayed at the customer's request,  
16 the customer shall contact the utility to reschedule an inspection. The investor-owned utility  
17 shall reschedule the inspection within 10 business days of the customer's request.

18 (8) Net Metering.

19 (a) Each investor-owned utility shall enable each customer-owned renewable  
20 generation facility interconnected to the investor-owned utility's electrical grid pursuant to this  
21 rule to net meter.

22 (b) Each investor-owned utility shall install, at no additional cost to the customer,  
23 metering equipment at the point of delivery capable of measuring the difference between the  
24 electricity supplied to the customer from the investor-owned utility and the electricity  
25 generated by the customer and delivered to the investor-owned utility's electric grid.

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1           (c) Meter readings shall be taken monthly on the same cycle as required under the  
2 otherwise applicable rate schedule.

3           (d) The investor-owned utility shall charge for electricity used by the customer in  
4 excess of the generation supplied by customer-owned renewable generation in accordance  
5 with normal billing practices.

6           (e) During any billing cycle, excess customer-owned renewable generation delivered  
7 to the investor-owned utility's electric grid shall be credited to the customer's energy  
8 consumption for the next month's billing cycle.

9           (f) Energy credits produced pursuant to subsection (8)(e) shall accumulate and be used  
10 to offset the customer's energy usage in subsequent months for a period of not more than  
11 twelve months. At the end of each calendar year, the investor-owned utility shall pay the  
12 customer for any unused energy credits at an average annual rate based on the investor-owned  
13 utility's COG-1, as-available energy tariff.

14           (g) When a customer leaves the system, that customer's unused credits for excess  
15 kWh generated shall be paid to the customer at an average annual rate based on the investor-  
16 owned utility's COG-1, as-available energy tariff.

17           (h) Regardless of whether excess energy is delivered to the investor-owned utility's  
18 electric grid, the customer shall continue to pay the applicable customer charge and applicable  
19 demand charge for the maximum measured demand during the billing period. The investor-  
20 owned utility shall charge for electricity used by the customer in excess of the generation  
21 supplied by customer-owned renewable generation at the investor-owned utility's otherwise  
22 applicable rate schedule. The customer may at their sole discretion choose to take service  
23 under the investor-owned utility's standby or supplemental service rate, if available.

24           (9) Renewable Energy Certificates. Customers shall retain any Renewable Energy  
25 Certificates associated with the electricity produced by their customer-owned renewable

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1 generation equipment. Any additional meters necessary for measuring the total renewable  
2 electricity generated for the purposes of receiving Renewable Energy Certificates shall be  
3 installed at the customer's expense, unless otherwise determined during negotiations for the  
4 sale of the customer's Renewable Energy Certificates to the investor-owned utility.

5 (10) Reporting Requirements. Each electric utility, as defined in Section 366.02(2),  
6 Florida Statutes, shall file with the Commission as part of its tariff a copy of its Standard  
7 Interconnection Agreement form for customer-owned renewable generation. In addition, each  
8 electric utility shall report the following, by April 1 of each year.

9 (a) Total number of customer-owned renewable generation interconnections as of the  
10 end of the previous calendar year;

11 (b) Total kW capacity of customer-owned renewable generation interconnected as of  
12 the end of the previous calendar year;

13 (c) Total kWh received by interconnected customers from the electric utility, by  
14 month and by year for the previous calendar year;

15 (d) Total kWh of customer-owned renewable generation delivered to the electric  
16 utility, by month and by year for the previous calendar year; and

17 (e) Total energy payments made to interconnected customers for customer-owned  
18 renewable generation delivered to the electric utility for the previous calendar year, along with  
19 the total payments made since the implementation of this rule.

20 (f) For each individual customer-owned renewable generation interconnection:

21 1. Renewable technology utilized;

22 2. Gross power rating;

23 3. Geographic location by county; and

24 4. Date interconnected.

25 (11) Dispute Resolution. Parties may seek resolution of disputes arising out of the

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1 interpretation of this rule pursuant to Rule 25-22.032, F.A.C, Customer Complaints, or Rule  
2 25-22.036, F.A.C., Initiation of Formal Proceedings.  
3 Specific Authority 350.127(2), 366.05(1), 366.92, FS. Law Implemented 366.02(2),  
4 366.04(2)(c), (5), (6), 366.041, 366.05(1), 366.81, 366.82(1),(2), 366.91(1),(2), 366.92, FS.  
5 History–New 2-11-02, Amended  
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